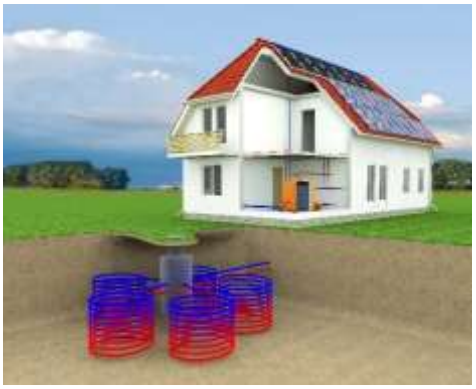
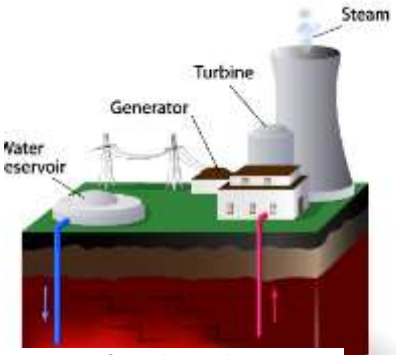


house heating with geothermal energy

Geothermal energy is used for heating (in Iceland, for example) and electrical energy production, but not on a large scale, which is a shame, because this is a clean and sustainable energy source. The principle of using geothermal energy is simple: there is a drill hole which serves as an injection drill hole, and another one which serves as a so-called production drill hole. In the first drill hole, we inject water at high pressure. This water goes through the ground to the production drill hole and heats up in the process. From the production drill hole, water (or steam) is pumped up and used to produce electricity in the surface. In some places, the heat underground is much higher and relatively close to the surface, and there are rock layers below and hard rock layers above. Those places (Iceland, for example) are ideal for EGS (enhanced geothermal systems). Power plants, for instance, are using geothermal energy. Drawbacks of such power plants are high costs of drill holes and limited capacity of production.



concept of geothermal power plant

geothermal power plant-Island